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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,248	12/09/1999	GEORGE NICHOLS	02103-365001	8624

26161 7590 10/08/2003

FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

NI, SUHAN

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/458,248

Applicant(s)

NICHOLS ET AL.

Examiner

Suhan Ni

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This communication is responsive to the election filed 08/04/2003.
2. Regarding the response to restriction requirement, applicant's request for reconsideration of the restriction requirement is persuasive and, therefore, the restriction requirement made 07/01/2003 is withdrawn. The examiner sincerely apologies for the delay.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-3, 5-6, 8, 10-14, 16-17 and 20-24 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Doug Newcomb (Car Stereo, Oct. 1999).

Regarding claim 1, Newcomb discloses an acoustic assembly (page 23), comprising: an electroacoustical transducer (Figs.); and an acoustic element (wave guide or grille), separate from said transducer, and structured to improve the acoustic performance of said transducer.

Regarding claims 2-3, Newcomb further discloses the acoustic assembly, wherein the acoustic element is a two-ended waveguide (page 23).

Regarding claims 5-6, Newcomb further discloses the acoustic assembly, wherein the acoustic assembly has a ported acoustic volume (page 23).

Regarding claim 8, Newcomb further discloses the acoustic assembly, wherein the acoustic assembly has a sealed acoustic volume (page 23).

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Regarding claim 10, Newcomb further discloses the acoustic assembly, wherein the vehicle pillar is an A-pillar (page 23).

Regarding claim 11, Newcomb discloses a structural automobile pillar containing an acoustic assembly (page 23), said acoustic assembly comprising: an electro-acoustical driver; and an acoustic element as claimed.

Regarding claim 12, Newcomb further discloses the automobile pillar, wherein the vehicle pillar is an A-pillar (page 23).

Regarding claims 13-14, Newcomb further discloses the automobile pillar, wherein the acoustic element is a two-ended waveguide (page 23).

Regarding claims 16-17, Newcomb further discloses the automobile pillar, wherein the acoustic assembly has a ported acoustic volume (page 23).

Regarding claim 20, Newcomb discloses an acoustic assembly (page 23), comprising: an electroacoustical transducer (Figs.); and an acoustic element (wave guide or grille), separate from said transducer, and structured to improve the acoustic performance of said electroacoustical transducer as claimed.

Regarding claim 21, Newcomb discloses a trim element for covering a vehicle pillar, said trim element forming an acoustic assembly (page 23).

Regarding claim 22, Newcomb further discloses the trim element, wherein the acoustic element is a two-ended waveguide (page 23).

Regarding claim 23, Newcomb further discloses the trim element, wherein the acoustic assembly is an acoustic volume (page 23).

Regarding claim 24, Newcomb further discloses the trim element, wherein the vehicle pillar is an A-pillar (page 23).

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4. Claims 25, 27 and 29 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Atkinson (US-1,930,577).

Regarding claim 25, Atkinson discloses an automobile pillar comprising a plurality of sound sources (11, 15, 20).

Regarding claim 27, Atkinson further discloses the automobile pillar, wherein a first of the sound sources comprises a first electroacoustic transducer(11) and a second of the sound sources comprises a port opening (15, 20) as claimed.

Regarding claim 29, Atkinson further discloses the automobile pillar, wherein said plurality of sound sources comprises an electroacoustic transducer(11) and a waveguide opening (15, 20) as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 7, 9, 15 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doug Newcomb (Car Stereo, Oct. 1999).

Regarding claim 4, Newcomb does not clearly show that the acoustic element is a single-ended waveguide as claimed. Since providing a single-ended waveguide for an acoustic transducer is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide the single-ended waveguide for the acoustic assembly, in order to provide an acoustic assembly having more directional sound features.

Regarding claims 7 and 9, Newcomb does not clearly show a second electroacoustical transducer as claimed. Since providing more than one speaker for an acoustic assembly is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide a multi-channel surrounding sound for users.

Regarding claim 15, Newcomb does not clearly show that the acoustic element is a single-ended waveguide as claimed. Since providing a single-ended waveguide for an acoustic transducer is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide the single-ended waveguide for the acoustic assembly, in order to provide an acoustic assembly having more directional sound features.

Regarding claim 18, Newcomb discloses a structural automobile pillar containing an acoustic assembly (page 23), said acoustic assembly comprising: an electro-acoustical driver; and an acoustic element, wherein the pillar is an A-pillar (page 23), and the acoustic assembly is a ported acoustic volume (page 23). But Newcomb does not clearly show a second electroacoustical transducer as claimed. Since providing more than one speaker for an acoustic assembly is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide a multi-channel surrounding sound for users.

Regarding claim 19, Newcomb further discloses the acoustic assembly, wherein the acoustic assembly has a sealed acoustic volume (page 23).

6. Claim 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson (US-1,930,577).

Regarding claims 26 and 28, Atkinson does not clearly show a second electroacoustical transducer as claimed. Since providing more than one speaker for an acoustic assembly is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide an acoustic assembly with desirable frequency coverage range.

Response to Amendment


7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is **(703)-308-9322**, and the number for fax machine is **(703)-305-9508**. The examiner can normally be reached on Monday through Thursday from 9:00 am to 7:30 pm. If it is necessary, the examiner's supervisor, **Curtis Kuntz**, can be reached at **(703) 305-4708**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is **(703) 305-3900**.

Suhan Ni
Patent Examiner
Art Unit 2643
USPTO


SUHAN NI
PATENT EXAMINER

September 30, 2003